COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

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DEC 12 2012

Ms. Diana Esher, Director
Air Protection Division (3AP00)
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Reference: § 111(d)/129 Plan for Sewage Sludge Incinerators

Dear Ms. Esher:

Pursuant to the requirements of §§ 111(d) and 129 of the federal Clean Air Act, we are officially requesting approval of a Section 111(d)/129 Plan developed under the authority of § 10.1-1307.2 A of the Virginia Air Pollution Control Law and submitted in accordance with the requirements of 40 CFR Part 60, Subpart B (Adoption and Submittal of State Plans for Designated Facilities).

This plan consists of (i) emission limitations and other regulatory requirements; (ii) an inventory of emissions from the affected facilities; and (iii) other supporting documentation.

Enclosed are the following:

1. § 111(d)/129 plan.

2. Certification of public participation activities.

3. Record of hearing and summary of public comment.

4. An electronic copy (CD) of the complete submittal. This electronic copy is an exact duplicate of the hard copy.

For purposes of this submittal, certain provisions are being included for information purposes only and are not to be construed as part of the Commonwealth of Virginia § 111(d)/129 Plan; these provisions are specifically identified in Enclosure 1 of this submittal.

If you have any questions or need additional information, please let us know.

Sincerely,

David K. Paylor

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Enclosures

COMMONWEALTH OF VIRGINIA
§ 111(D)/129 PLAN FOR
SEWAGE SLUDGE INCINERATORS

PREAMBLE

BACKGROUND

Designated pollutants are pollutants which are not included on a list published under § 108(a) of the federal Clean Air Act (National Ambient Air Quality Standards) or § 112(d) (hazardous air pollutants), but for which standards of performance for new sources have been established under § 111(b) (new source performance standards).

A designated facility is an existing facility which emits a designated pollutant and which would be subject to a standard of performance for that pollutant if the facility were new. The Clean Air Act requires the U.S. Environmental Protection Agency (EPA) to establish procedures by which states submit plans to control facilities that emit designated pollutants. These procedures were established in 1975 for adoption and submittal of state plans for control of designated pollutants from designated facilities (Subpart B of 40 CFR Part 60).

Section 129 requires that EPA establish performance standards and other requirements pursuant to § 111 and § 129 for each category of solid waste incineration units. Such standards include emissions limitations and other requirements applicable to new units and guidelines (under §§ 111(d) and 129) and other requirements applicable to existing units. It also requires states to submit plans for these sources in a process similar to that delineated in § 111(d).

Subpart B provides that EPA publish guideline documents for development of state emission standards after promulgation of any standard of performance for designated pollutants. The documents must specify emission guidelines, times for compliance and include other pertinent information such as a discussion of the pollutant's effects on public health and welfare, and a description of control techniques including effectiveness and costs. The emission guidelines reflect the degree of emission reduction attainable with the best adequately demonstrated systems of emission reduction, considering costs, applied to existing facilities.

EPA has established recommended emission limits for sewage sludge incinerators (SSIs). The limits were published in the Federal Register of March 21, 2011 (76 FR 15372).

The provisions for adoption and submittal of state plans for designated pollutants are patterned after § 110 of the Clean Air Act: twelve months for states to develop and submit plans once final EPA guidelines have been published; four months for EPA approval or disapproval; and if disapproved, EPA will promulgate a new plan within six months.

DISCUSSION

Under EPA guidelines, the § 111(d)/129 plan must define legal authority and establish emission standards and compliance schedules, as well as contain an emission inventory of polluting facilities and establish methods for conducting source surveillance. Virginia's § 111(d)/129 plan for SSIs is included as Part 1. EPA's specific plan requirements as found in 40 CFR 60.5015 (see Part 2 of the plan) and Virginia's corresponding plan are summarized in the following table.

EPA REQUIREMENT	VIRGINIA PLAN
A. 40 CFR 60.5015(a)(1): Inventory of affected SSI units, including those that have ceased operation but have not been dismantled.	Part 1, Attachment B.
B. 40 CFR 60.5015(a)(2): Inventory of emissions from affected SSI units in your State.	Part 1, Attachment B.
C. 40 CFR 60.5015(a)(3): Compliance schedules for each affected SSI unit.	Rule 4-55, 9 VAC 5-40-8280 (Part 1, Attachment A).
D. 40 CFR 60.5015(a)(4): Emission limits, emission standards, operator training and qualification requirements, and operating limits for affected SSI units that are at least as protective as the emission guidelines contained in this subpart.	Rule 4-55, 9 VAC 5-40-8200 et seq. (Part 1, Attachment A).
E. 40 CFR 60.5015(a)(5): Performance testing, recordkeeping, and reporting requirements.	Rule 4-55, 9 VAC 5-40-8200 et seq. (Part 1, Attachment A).
F. 40 CFR 60.5015(a)(6): Certification that the hearing on the state plan was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission.	Enclosures 2 and 3.
G. 40 CFR 60.5015(a)(7): Provision for State progress reports to EPA.	Part 1.
H. 40 CFR 60.5015(a)(8): Identification of enforceable state mechanisms that you selected for implementing the emission guidelines of this subpart.	9VAC5 Chapters 10, 20, 40, and 170 (Part 1).
I. 40 CFR 60.5015(a)(9): Demonstration of your state's legal authority to carry out the §§ 111(d) and 129 state plan.	Air Pollution Control Law of Virginia (Part 1); Attorney General certification (Part 1).
J. Discretionary authority.	Part 1.

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COMMONWEALTH OF VIRGINIA
§ 111(D)/129 PLAN
FOR SEWAGE SLUDGE INCINERATORS

DEFINITIONS

The following definitions are part of the Commonwealth's plan:

"Alternative method" means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for the Administrator's determination of compliance.

"Compliance schedule" means a legally enforceable schedule specifying a date or dates by which a source or category of sources must comply with specific emission standards contained in a plan or with any increments of progress to achieve such compliance.

"Designated pollutant" means any air pollutant, emissions of which are subject to a standard of performance for new stationary sources but for which air quality criteria have not been issued, and which is not included on a list published under § 108(a) or § 112(b)(1)(A) of the Clean Air Act.

"Designated facility" means any existing facility (see 40 CFR 60.2(aa)) which emits a designated pollutant and which would be subject to a standard of performance for that pollutant if the existing facility were an affected facility (see 40 CFR 60.2(e)).

"Emission guideline" means a guideline set forth in 40 CFR subpart C, or in a final guideline document published under 40 CFR 60.22(a), which reflects the degree of emission reduction achievable through the application of the best system of emission reduction which (taking into account the cost of such reduction) the Administrator has determined has been adequately demonstrated for designated facilities.

"Emission standard" means a legally enforceable regulation setting forth an allowable rate of emissions into the atmosphere, or prescribing equipment specifications for control of air pollution emissions.

"Equivalent method" means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

"Increments of progress" means steps to achieve compliance which must be taken by an owner or operator of a designated facility, including: (1) Submittal of a final control plan for the designated facility to the appropriate air pollution control agency; (2)

Awarding of contracts for emission control systems or for process modifications, or issuance of orders for the purchase of component parts to accomplish emission control or process modification; (3) Initiation of on-site construction or installation of emission control equipment or process change; (4) Completion of on-site construction or installation of emission control equipment or process change; and (5) Final compliance.

"Intermediate change to a reference method" means a within-method modification to a reference method involving "proven technology" (generally accepted by the scientific community as equivalent or better) that is applied on a site-specific basis and that may have the potential to decrease the stringency of the associated emission limitation or standard. Intermediate changes are not approvable if they decrease the stringency of the standard. Though site-specific, an intermediate change may set a national precedent for a source category and may ultimately result in a revision to the reference method. In order to be approved, an intermediate change must be validated to demonstrate that it provides equal or improved accuracy and precision. Examples of intermediate changes to a reference method include, but are not limited to: (1) modifications to a reference method's sampling procedure including substitution of sampling equipment that has been demonstrated for a particular sample matrix and the use of a different impinger absorbing solution; (2) changes in sample recovery procedures and analytical techniques, such as changes to sample holding times and use of a different analytical finish with proven capability for the analyte of interest; and (3) "combining" a reference method with another proven method for application to processes emitting multiple pollutants.

“Intermediate change to monitoring” means a modification to federally required monitoring involving "proven technology" (generally accepted by the scientific community as equivalent or better) that is applied on a site-specific basis and that may have the potential to decrease the stringency of the compliance and enforcement measures for the relevant standard. Though site-specific, an intermediate decrease may set a national precedent for a source category and may ultimately result in a revision to the federally required monitoring. Examples of intermediate changes to monitoring include, but are not limited to: (1) use of a continuous emission monitoring system (CEMS) in lieu of a parameter monitoring approach; (2) changes to quality control requirements for parameter monitoring; and (3) use of an electronic data reduction system in lieu of manual data reduction.

"Major change to a reference method" means a modification to a federally enforceable reference method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required reference method is unsuitable). A major change to a reference method may be site-specific or may apply to one or more source categories and will usually set a national precedent. Examples of major changes to a reference method include, but are not limited to: (1) use of an unproven analytical finish; (2) use of a method developed to fill a reference method gap; (3) use of a new reference method developed to apply to a control technology not contemplated in the applicable regulation; and (4) "combining" two or more sampling/analytical methods (at least one unproven) into one for application to

processes.

"Major change to monitoring" means a modification to federally required monitoring that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required monitoring is unsuitable). A major change to a test method may be site-specific or may apply to one or more source categories and will usually set a national precedent. Examples of major changes to test method include, but are not limited to: (1) use of a new monitoring approach developed to apply to a control technology not contemplated in the applicable regulation; (2) use of a predictive emission monitoring system (PEMS) in place of a required continuous emission monitoring system (CEMS); (3) use of alternative calibration procedures that do not involve calibration gases or test cells; (4) use of an analytical technology that differs from that specified by a performance specification; and (5) use of alternative averaging times for reporting purposes.

"Minor change to a reference method" means a modification to a reference method that (1) does not decrease the stringency of the emission limitation or standard; (2) has no national significance (e.g., does not affect implementation of the applicable regulation for other affected facilities, does not set a national precedent, and individually does not result in a revision to the reference method); and (3) is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of the affected facility. Examples of minor changes to a reference method include use of a modified sampling traverse or location to avoid interference from an obstruction in the stack, increasing the sampling time or volume, use of additional impingers for a high moisture situation, accepting the particulate emission test results for a test run that was conducted with lower than specified temperature, substitution of a material in a sampling train that has been demonstrated to be more inert for the sample matrix, and changes in recovery and analytical techniques such as a change in quality control/quality assurance requirements needed to adjust for analysis of a certain sample matrix.

"Minor change to monitoring" means a modification to federally required monitoring that (a) does not decrease the stringency of the compliance and enforcement measures for the relevant standard; (b) has no national significance (that is, does not affect implementation of the applicable regulation for other affected sources, does not set a national precedent, and individually does not result in a revision to the monitoring requirements); and (c) is site-specific, made to reflect or accommodate the operational characteristics, physical constraints, or safety concerns of an affected source. Examples of minor changes to monitoring include, but are not limited to: (1) modifications to a sampling procedure, such as use of an improved sample conditioning system to reduce maintenance requirements; (2) increased monitoring frequency; and (3) modification of the environmental shelter to moderate temperature fluctuation and thus protect the analytical instrumentation.

"Plan" means a plan under § 111(d) or § 129 of the Clean Air Act which establishes emission standards for designated pollutants from designated facilities and

provides for the implementation and enforcement of the reference methods and emission standards.

PLAN PROVISIONS

A. Source Inventory

As required by 40 CFR 60.25(a) and 40 CFR 60.5015(a)(1), the plan includes an inventory of affected SSI units, including those that have ceased operation but have not been dismantled This source inventory is included as Attachment B.

B. Emissions Inventory

As required by 40 CFR 60.25(a) and 40 CFR 60.5015(a)(2), emissions data for the designated pollutants has been collected for all affected SSIs. This information is included as Attachment B.

C. Compliance Schedule

As required by 40 CFR 60.21 and 40 CFR 60.5015(a)(3), the plan contains a compliance schedule, including increments of progress. The compliance schedule found in 9VAC5-40-8280 meets the requirements of 40 CFR Subpart MMMM; see Attachment A.

D. Emission Limits, Emission Standards, Operator Training, and Operating Limits

As required by 40 CFR 60.24(c) and 40 CFR 60.5015(a)(4), the plan includes emission limits, emission standards, operator training and qualification requirements, and operating limits that will be used to implement and enforce the plan. These standards are at least as protective as those found in 40 CFR Subpart MMMM, and are located in Attachment A.

E. Testing, Recordkeeping and Reporting

As required by 40 CFR 60.24(b)2 and 40 CFR 60.5015(a)(5), the plan contains testing, recordkeeping, and reporting requirements that will be used to monitor source compliance. These requirements are identical to those found in 40 CFR Subpart MMMM, and are located in Attachment A.

As required by 40 CFR 60.25b, the plan contains provisions for the board to conduct source surveillance, compliance assurance, and enforcement activities. General state requirements covering testing, monitoring, recordkeeping, and reporting are found in Part I of 9VAC5 Chapter 40, which was provided to EPA in a separate submittal dated August 11, 2003[1], and which is cross-referenced as appropriate in the corresponding

[1] Although these requirements have been modified since this date, none of the changes have any practical effect on this submittal or any direct impact on the Commonwealth's ability to implement its § 111(d)/129 program, and there is no need to re-submit them.

portions of the state SSI regulation.

Provisions to require emissions data on a periodic basis are found in 9VAC5-20-160. Provisions concerning the availability of information are found in 9VAC5-170-60. These provisions were provided to EPA in a separate submittal dated August 11, 2003.

Testing will be performed in accordance with the applicable reference methods. Alternatives and changes to the reference methods may be used in accordance with the authority outlined in subsection J below.

F. Certification of Hearing

As required by 40 CFR 60.23 and 40 CFR 60.5015(a)(6), the plan contains certification that the hearing on the plan was held, a list of attendees and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission. The public hearing materials may be found in Enclosures 2 and 3 of the plan.

G. Annual Progress Reports

The Commonwealth commits to providing EPA with annual progress reports as required by 40 CFR 60.25(e) and (f), and 40 CFR 60.5015(a)(7). As required by 40 CFR 60.25(f)(1) through 40 CFR 60.25(f)(6), each progress report will include: enforcement actions, achievement of increments of progress, identification of sources that have ceased operation, emission inventory information for sources that were not in operation at the time of plan development, updated emission inventory and compliance information, and copies of technical reports on all emission testing, including concurrent process data.

H. Enforceable State Mechanisms

The primary enforceable state mechanisms adopted by the board for implementing the emission guidelines are set forth in the primary implementing regulation, Article 55 (9VAC5-40-8200 et seq.) of 9VAC5-40 (Existing Stationary Sources). A list of the specific provisions of this regulation that apply to the plan, as well as the regulation itself, are provided in Attachment A.

As required by 40 CFR 60.26(a), the enforceable general state mechanisms adopted by the board for implementing the specific emission guidelines are set forth in the State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution and in the Regulation for General Administration. These regulations are intended to serve the air regulatory program as a whole, and are used to implement a number of plans and programs, including each individual regulation governing each particular emission guideline. A list of the specific provisions of the general regulations that apply to the plan as well as a copy of the regulations was provided to EPA in a separate submittal dated August 11, 2003.

I. Legal Authority

As required by 40 CFR 60.26 and 60.5015(a)(9), the State Air Pollution Control Board has the legal authority to implement the § 111(d)/129 Plan for sewage sludge incinerators.

The basic legal authority for the State Air Pollution Control Board to carry out its responsibilities is provided in the Air Pollution Control Law of Virginia (Title 10.1, Chapter 13, of the Code of Virginia). A copy of the law was provided to EPA in a separate submittal dated August 11, 2003. The Attorney General has certified that the board has the legal authority to carry out the requirements of 40 CFR 60.26(a). This certification was provided to EPA in a separate submittal dated August 11, 2003.

In addition, a copy of the letter from the Attorney General affirming the board's authority to adopt the state regulation (Article 55) implementing 40 CFR Subpart MMMM is included at the end of this part.

J. Discretionary Authority

Discretionary authority related to certain decisions required to implement the plan by EPA and the department is as follows. Any authority not set forth below is assumed to rest with the department. The department shall obtain prior approval from EPA Region III before implementing any of the following:

1. Alternatives to emission limits and standards in 9VAC5-40-8220 and operating limits established under 9VAC5-40-8290 or 9VAC5-40-8300 B 3 relevant to 40 CFR 60.5190.

2. Approval of major alternatives to test methods.

3. Approval of major alternatives to monitoring.

4. Approval of major alternatives to recordkeeping and reporting.

5. The requirements in 9VAC5-40-8290 B relevant to § 60.5175.

6. The requirements in 9VAC5-40-8270 relevant to § 60.5155(b)(2).

7. Performance test and data reduction waivers under 40 CFR 60.8(b).

COMMONWEALTH of VIRGINIA

Office of the Attorney General

Kenneth T. Cuccinelli, II
Attorney General

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Richmond, Virginia 23219
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7-1-1

June 12, 2012

The Honorable David K. Paylor, Director
Virginia Department of Environmental Quality
629 East Main Street
Richmond, Virginia 23219

Re: Authority to Promulgate Amendments to Regulations for the Control and Abatement of Air Pollution (9 VAC 5-20 - General Provisions and 9 VAC 5-40 Existing Sources)

Dear Director Paylor:

I have reviewed the above-referenced regulations. It is my opinion that the State Air Pollution Control Board has authority to promulgate these regulations under applicable law, including Chapter 13 of Title 10.1 of the Code of Virginia and that the proposed amendments comport with applicable state law. Further, it is my opinion that the promulgation of this regulation is exempt from the Virginia Administrative Process Act, Va. Code §§ 2.2-4000 et seq., pursuant to Va. Code § 2.2-4006(A)(4)(c).

If I may be of any further assistance to you relating to this matter, please do not hesitate to contact me.

Sincerely,

David C. Grandis
Assistant Attorney General

COMMONWEALTH OF VIRGINIA
§ 111(D)/129 PLAN
FOR SEWAGE SLUDGE INCINERATORS

PRIMARY STATE ENFORCEABLE MECHANISMS

The following table lists the specific provisions from the primary implementing regulation of the State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution that will be used to implement the § 111(d)/129 plan. Except as noted otherwise, these provisions are to be included in the plan. Highlighted provisions are not to be construed as part of the Commonwealth's § 111(d)/129 plan. A copy of the primary regulation follows this table. Related general regulations from the Regulations for the Control and Abatement of Air Pollution as well as the Regulation for General Administration that will also be used to implement the plan were previously provided to EPA under a separate submission dated August 11, 2003.

REGULATIONS FOR THE CONTROL AND ABATEMENT OF AIR POLLUTION

9VAC5 CHAPTER 40	EXISTING STATIONARY SOURCES
PART II	**EMISSION STANDARDS**
ARTICLE 55	EMISSION STANDARDS FOR SEWAGE SLUDGE INCINERATORS (Rule 4-55)
9VAC5-40-8200	Applicability and designation of affected facility
9VAC5-40-8210	Definitions
9VAC5-40-8220	Emission limits and emission standards
9VAC5-40-8230	Standard for visible emissions
9VAC5-40-8240	Standard for fugitive dust/emissions Subsection A
9VAC5-40-8250.	Standard for odor
9VAC5-40-8260.	Standard for toxic pollutants
9VAC5-40-8270	Operator training and certification
9VAC5-40-8280	Compliance schedule
9VAC5-40-8290	Operating requirements
9VAC5-40-8300	Compliance Subsection A and subdivision B 1
9VAC5-40-8310	Performance testing, monitoring, and calibration requirements Subsection A and subdivisions B 1 and B 2
9VAC5-40-8320	Recordkeeping and reporting Subsection A and subdivision B 1
9VAC5-40-8330	Registration
9VAC5-40-8340	Facility and control equipment maintenance or

	malfunction
	Subsection A and subdivision B 1
9VAC5-40-8350	Federal (Title V) operating permits
9VAC5-40-8360	Other permits
9VAC5-40-8370	Documents incorporated by reference

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9VAC5 CHAPTER 20.
GENERAL PROVISIONS.

PART I.
Administrative.

9VAC5-20-21. Documents incorporated by reference.

A. The Administrative Process Act and Virginia Register Act provide that state regulations may incorporate documents by reference. Throughout these regulations, documents of the types specified below have been incorporated by reference.

1. United States Code.

2. Code of Virginia.

3. Code of Federal Regulations.

4. Federal Register.

5. Technical and scientific reference documents.

Additional information on key federal regulations and nonstatutory documents incorporated by reference and their availability may be found in subsection E of this section.

B. Any reference in these regulations to any provision of the Code of Federal Regulations (CFR) shall be considered as the adoption by reference of that provision. The specific version of the provision adopted by reference shall be that contained in the CFR (~~2010~~ 2012) in effect July 1, ~~2010~~ 2012. In making reference to the Code of Federal Regulations, 40 CFR Part 35 means Part 35 of Title 40 of the Code of Federal Regulations; 40 CFR 35.20 means § 35.20 in Part 35 of Title 40 of the Code of Federal Regulations.

C. Failure to include in this section any document referenced in the regulations shall not invalidate the applicability of the referenced document.

D. Copies of materials incorporated by reference in this section may be examined by the public at the central office of the Department of Environmental Quality, Eighth Floor, 629 East Main Street, Richmond, Virginia, between 8:30 a.m. and 4:30 p.m. of each business day.

E. Information on federal regulations and nonstatutory documents incorporated by reference and their availability may be found below in this subsection.

1. Code of Federal Regulations.

a. The provisions specified below from the Code of Federal Regulations (CFR) are incorporated herein by reference.

(1) 40 CFR Part 50 - National Primary and Secondary Ambient Air Quality Standards.

(a) Appendix A-1 - Reference Measurement Principle and Calibration Procedure for the Measurement of Sulfur Dioxide in the Atmosphere (Ultraviolet Fluorescence Method).

(b) Appendix A-2 - Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method).

(c) Appendix B - Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method).

(d) Appendix C - Measurement Principle and Calibration Procedure for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry).

(e) Appendix D - Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere.

(f) Appendix E - Reserved.

(g) Appendix F - Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence).

(h) Appendix G - Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air.

(i) Appendix H - Interpretation of the National Ambient Air Quality Standards for Ozone.

(j) Appendix I - Interpretation of the 8-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone.

(k) Appendix J - Reference Method for the Determination of Particulate Matter as PM_{10} in the Atmosphere.

(l) Appendix K - Interpretation of the National Ambient Air Quality Standards for Particulate Matter.

(m) Appendix L - Reference Method for the Determination of Fine Particulate Matter as $PM_{2.5}$ in the Atmosphere.

(n) Appendix M - Reserved.

(o) Appendix N - Interpretation of the National Ambient Air Quality Standards for $PM_{2.5}$.

(p) Appendix O - Reference Method for the Determination of Coarse Particulate Matter as PM in the Atmosphere.

(q) Appendix P - Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone.

(r) Appendix Q - Reference Method for the Determination of Lead in Suspended Particulate Matter as PM_{10} Collected From Ambient Air.

(s) Appendix R - Interpretation of the National Ambient Air Quality Standards for Lead.

(t) Appendix S - Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Nitrogen (Nitrogen Dioxide).

(u) Appendix T - Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide).

(2) 40 CFR Part 51 -- Requirements for Preparation, Adoption, and Submittal of Implementation Plans.

(a) Appendix M -- Recommended Test Methods for State Implementation Plans.

(b) Appendix S -- Emission Offset Interpretive Ruling.

(c) Appendix W -- Guideline on Air Quality Models (Revised).

(d) Appendix Y - Guidelines for BART Determinations Under the Regional Haze Rule.

(3) 40 CFR Part 55 -- Outer Continental Shelf Air Regulations.

(4) 40 CFR Part 58 -- Ambient Air Quality Surveillance.

Appendix A - Quality Assurance Requirements for

SLAMS, SPMs and PSD Air Monitoring.

(5) 40 CFR Part 59 -- National Volatile Organic Compound Emission Standards for Consumer and Commercial Products.

(a) Subpart C - National Volatile Organic Compound Emission Standards for Consumer Products.

(b) Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings, Appendix A -- Determination of Volatile Matter Content of Methacrylate Multicomponent Coatings Used as Traffic Marking Coatings.

(6) 40 CFR Part 60 -- Standards of Performance for New Stationary Sources.

The specific provisions of 40 CFR Part 60 incorporated by reference are found in Article 5 (9VAC5-50-400 et seq.) of Part II of 9VAC5-50 (New and Modified Sources).

(7) 40 CFR Part 61 -- National Emission Standards for Hazardous Air Pollutants.

The specific provisions of 40 CFR Part 61 incorporated by reference are found in Article 1 (9VAC5-60-60 et seq.) of Part II of 9VAC5-60 (Hazardous Air Pollutant Sources).

(8) 40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories.

The specific provisions of 40 CFR Part 63 incorporated by reference are found in Article 2 (9VAC5-60-90 et seq.) of Part II of 9VAC5-60 (Hazardous Air Pollutant Sources).

(9) 40 CFR Part 64, Compliance Assurance Monitoring.

(10) 40 CFR Part 72, Permits Regulation.

(11) 40 CFR Part 73, Sulfur Dioxide Allowance System.

(12) 40 CFR Part 74, Sulfur Dioxide Opt-Ins.

(13) 40 CFR Part 75, Continuous Emission Monitoring.

(14) 40 CFR Part 76, Acid Rain Nitrogen Oxides Emission

Reduction Program.

(15) 40 CFR Part 77, Excess Emissions.

(16) 40 CFR Part 78, Appeal Procedures for Acid Rain Program.

(17) 40 CFR Part 152 Subpart I, Classification of Pesticides.

(18) 49 CFR Part 172, Hazardous Materials Table. Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements, Subpart E, Labeling.

(19) 29 CFR Part 1926 Subpart F, Fire Protection and Prevention.

b. Copies may be obtained from: Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954; phone (202) 783-3238.

2. U.S. Environmental Protection Agency.

a. The following documents from the U.S. Environmental Protection Agency are incorporated herein by reference:

(1) Reich Test, Atmospheric Emissions from Sulfuric Acid Manufacturing Processes, Public Health Service Publication No. PB82250721, 1980.

(2) Compilation of Air Pollutant Emission Factors (AP-42). Volume I: Stationary and Area Sources, stock number 055-000-00500-1, 1995; Supplement A, stock number 055-000-00551-6, 1996; Supplement B, stock number 055-000-00565, 1997; Supplement C, stock number 055-000-00587-7, 1997; Supplement D, 1998; Supplement E, 1999.

(3) "Guidelines for Determining Capture Efficiency" (GD-35), Emissions Monitoring and Analysis Division, Office of Air Quality Planning and Standards, January 9, 1995.

b. Copies of the document identified in subdivision E 2 a (1) of this subdivision, and Volume I and Supplements A through C of the document identified in subdivision E 2 a (2) of this subdivision, may be obtained from: U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161; phone 1-800-553-6847. Copies of Supplements D and E of the document identified in subdivision E 2 a (2) of this subdivision may be obtained online from EPA's Technology Transfer Network at http://www.epa.gov/ttn/index.html. Copies of the document identified in subdivision E 2 a (3) of this subdivision are only available online

from EPA's Technology Transfer Network at http://www.epa.gov/ttn/emc/guidlnd.html.

3. U.S. government.

a. The following document from the U.S. government is incorporated herein by reference: Standard Industrial Classification Manual, 1987 (U.S. Government Printing Office stock number 041-001-00-314-2).

b. Copies may be obtained from: Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954; phone (202) 512-1800.

4. American Society for Testing and Materials (ASTM).

a. The documents specified below from the American Society for Testing and Materials are incorporated herein by reference.

(1) D323-99a, "Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method)."

(2) D97-96a, "Standard Test Method for Pour Point of Petroleum Products."

(3) D129-00, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)."

(4) D388-99, "Standard Classification of Coals by Rank."

(5) D396-98, "Standard Specification for Fuel Oils."

(6) D975-98b, "Standard Specification for Diesel Fuel Oils."

(7) D1072-90(1999), "Standard Test Method for Total Sulfur in Fuel Gases."

(8) D1265-97, "Standard Practice for Sampling Liquefied Petroleum (LP) Gases (Manual Method)."

(9) D2622-98, "Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry."

(10) D4057-95(2000), "Standard Practice for Manual Sampling of Petroleum and Petroleum Products."

(11) D4294-98, "Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy."

(12) D523-89, "Standard Test Method for Specular Gloss" (1999).

(13) D1613-02, "Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer and Related Products" (2002).

(14) D1640-95, "Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature" (1999).

(15) E119-00a, "Standard Test Methods for Fire Tests of Building Construction Materials" (2000).

(16) E84-01, "Standard Test Method for Surface Burning Characteristics of Building Construction Materials" (2001).

(17) D4214-98, "Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films" (1998).

(18) D86-04b, "Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure" (2004).

(19) D4359-90, "Standard Test Method for Determining Whether a Material is a Liquid or a Solid" (reapproved 2000).

(20) E260-96, "Standard Practice for Packed Column Gas Chromatography" (reapproved 2001).

(21) D3912-95, "Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants" (reapproved 2001).

(22) D4082-02, "Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants."

(23) F852-99, "Standard Specification for Portable Gasoline Containers for Consumer Use" (reapproved 2006).

(24) F976-02, "Standard Specification for Portable Kerosine and Diesel Containers for Consumer Use."

(25) D4457-02, "Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph" (reapproved 2008).

(26) D3792-05, "Standard Test Method for Water Content of Coatings by Direct Injection Into a Gas Chromatograph."

(27) D2879-97, "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope" (reapproved 2007).

b. Copies may be obtained from: American Society for Testing Materials, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959; phone (610) 832-9585.

5. American Petroleum Institute (API).

a. The following document from the American Petroleum Institute is incorporated herein by reference: Evaporative Loss from Floating Roof Tanks, API MPMS Chapter 19, April 1, 1997.

b. Copies may be obtained from: American Petroleum Institute, 1220 L Street, Northwest, Washington, D.C. 20005; phone (202) 682-8000.

6. American Conference of Governmental Industrial Hygienists (ACGIH).

a. The following document from the ACGIH is incorporated herein by reference: 1991-1992 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices (ACGIH Handbook).

b. Copies may be obtained from: ACGIH, 1330 Kemper Meadow Drive, Suite 600, Cincinnati, Ohio 45240; phone (513) 742-2020.

7. National Fire Prevention Association (NFPA).

a. The documents specified below from the National Fire Prevention Association are incorporated herein by reference.

(1) NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids, 2000 Edition.

(2) NFPA 30, Flammable and Combustible Liquids Code, 2000 Edition.

(3) NFPA 30A, Code for Motor Fuel Dispensing Facilities and Repair Garages, 2000 Edition.

b. Copies may be obtained from the National Fire Prevention Association, One Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101;

phone (617) 770-3000.

8. American Society of Mechanical Engineers (ASME).

a. The documents specified below from the American Society of Mechanical Engineers are incorporated herein by reference.

(1) ASME Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1--1964 (R1991).

(2) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971).

(3) Standard for the Qualification and Certification of Resource Recovery Facility Operators, ASME QRO-1-1994.

b. Copies may be obtained from the American Society of Mechanical Engineers, Three Park Avenue, New York, New York 10016; phone (800) 843-2763.

9. American Hospital Association (AHA).

a. The following document from the American Hospital Association is incorporated herein by reference: An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities, AHA Catalog no. W5-057007, 1993.

b. Copies may be obtained from: American Hospital Association, One North Franklin, Chicago, IL 60606; phone (800) 242-2626.

10. Bay Area Air Quality Management District (BAAQMD).

a. The following documents from the Bay Area Air Quality Management District are incorporated herein by reference:

(1) Method 41, "Determination of Volatile Organic Compounds in Solvent-Based Coatings and Related Materials Containing Parachlorobenzotrifluoride" (December 20, 1995).

(2) Method 43, "Determination of Volatile Methylsiloxanes in Solvent-Based Coatings, Inks, and Related Materials" (November 6, 1996).

b. Copies may be obtained from: Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109, phone (415) 771-6000.

11. South Coast Air Quality Management District (SCAQMD).

a. The following documents from the South Coast Air Quality Management District are incorporated herein by reference:

(1) Method 303-91, "Determination of Exempt Compounds," in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).

(2) Method 318-95, "Determination of Weight Percent Elemental Metal in Coatings by X-Ray Diffraction," in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).

(3) Rule 1174 Ignition Method Compliance Certification Protocol (February 28, 1991).

(4) Method 304-91, "Determination of Volatile Organic Compounds (VOC) in Various Materials," in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).

(5) Method 316A-92, "Determination of Volatile Organic Compounds (VOC) in Materials Used for Pipes and Fittings" in Manual SSMLLABM, "Laboratory Methods of Analysis for Enforcement Samples" (1996).

(6) "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems," October 3, 1989.

b. Copies may be obtained from: South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, CA 91765, phone (909) 396-2000.

12. California Air Resources Board (CARB).

a. The following documents from the California Air Resources Board are incorporated herein by reference:

(1) Test Method 510, "Automatic Shut-Off Test Procedure for Spill-Proof Systems and Spill-Proof Spouts" (July 6, 2000).

(2) Test Method 511, "Automatic Closure Test Procedure for Spill-Proof Systems and Spill-Proof Spouts" (July 6, 2000).

(3) Method 100, "Procedures for Continuous Gaseous Emission Stack Sampling" (July 28, 1997).

(4) Test Method 513, "Determination of Permeation Rate for Spill-Proof Systems" (July 6, 2000).

(5) Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds in Aerosol Coating Products (Including Appendices A and B)" (May 5, 2005).

(6) California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 1, § 94503.5 (2003).

(7) California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 2, §§ 94509 and 94511 (2003).

(8) California Code of Regulations, Title 17, Division 3, Chapter 1, Subchapter 8.5, Article 4, §§ 94540-94555 (2003).

(9) "Certification Procedure 501 for Portable Fuel Containers and Spill-Proof Spouts, CP-501" (July 26, 2006).

(10) "Test Procedure for Determining Integrity of Spill-Proof Spouts and Spill-Proof Systems, TP-501" (July 26, 2006).

(11) "Test Procedure for Determining Diurnal Emissions from Portable Fuel Containers, TP-502" (July 26, 2006).

b. Copies may be obtained from: California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812, phone (906) 322-3260 or (906) 322-2990.

13. American Architectural Manufacturers Association.

a. The following documents from the American Architectural Manufacturers Association are incorporated herein by reference:

(1) Voluntary Specification 2604-02, "Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels" (2002).

(2) Voluntary Specification 2605-02, "Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels" (2002).

b. Copies may be obtained from: American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550, Schaumburg, IL 60173, phone (847) 303-5664.

14. American Furniture Manufacturers Association.

a. The following document from the American Furniture

Manufacturers Association is incorporated herein by reference: Joint Industry Fabrics Standards Committee, Woven and Knit Residential Upholstery Fabric Standards and Guidelines (January 2001).

b. Copies may be obtained from: American Furniture Manufacturers Association, P.O. Box HP-7, High Point, NC 27261; phone (336) 884-5000.

9VAC5 CHAPTER 40.
EXISTING SOURCES.

PART II.
Emission Standards.

ARTICLE 55.
Emission Standards for
Sewage Sludge Incineration Units (Rule 4-55).

9VAC5-40-8200. Applicability and designation of affected facility.

A. The affected facilities to which the provisions of this article apply are sewage sludge incineration (SSI) units that meet all of the following criteria:

1. SSI units that commenced construction on or before October 14, 2010.

2. SSI units that meet the definition of a SSI unit as defined in 9VAC5-40-8210.

3. SSI units not exempt under subsection D of this section.

B. The provisions of this article apply throughout the Commonwealth of Virginia.

C. The following provisions govern changes to SSI units.

1. If the owner of a SSI unit makes changes that meet the definition of modification after September 21, 2011, the SSI unit becomes subject to subpart LLLL of 40 CFR Part 60 and the provisions of this article no longer apply to that unit.

2. If the owner of a SSI unit makes physical or operational changes to a SSI unit for which construction commenced on or before September 21, 2011 primarily to comply with the provisions of this article, subpart LLLL of 40 CFR Part 60 does not apply to that unit. Such changes do not qualify as modifications under subpart LLLL of 40 CFR Part 60.

D. Exempt from the provisions of this article are combustion units that incinerate sewage sludge and are not located at a wastewater treatment facility designed to treat

domestic sewage sludge. These units may be subject to 40 CFR Part 60 (e.g., subpart CCCC of 40 CFR Part 60). The owner of such a combustion unit shall notify the board of an exemption claim under this subsection.

E. The provisions of 40 CFR Part 60 (other than Subpart MMMM of 40 CFR Part 60) cited in this article are applicable only to the extent that they are incorporated by reference in Article 5 (9VAC5-50-400 et seq.) of Part II of 9VAC5-50 (New and Modified Stationary Sources).

F. The provisions of Subpart MMMM (Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units) of 40 CFR Part 60 cited in this article are applicable only to the extent that they are incorporated by reference in 9VAC5-40-8370.

9VAC5-40-8210. Definitions.

A. For the purpose of applying this article in the context of the Regulations for the Control and Abatement of Air Pollution and related uses, the words or terms shall have the meanings given them in subsection C of this section.

B. As used in this article, all terms not defined herein shall have the meanings given them in 9VAC5-10 (General Definitions), unless otherwise required by context.

C. Terms shall have the meaning given them in 40 CFR 60.5250, except for the following:

"Administrator" means the board.

"Performance test, as defined in § 63.2" means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

"Table 1" means 9VAC5-40-8280 A and B.

"You" means the owner of an affected SSI unit.

9VAC5-40-8220. Emission limits and emission standards.

A. No owner or other person shall cause or permit to be discharged into the atmosphere from any SSI unit any emissions in excess of that allowed under subsection B of this section.

B. The provisions of 40 CFR 60.5165 apply.

9VAC5-40-8230. Standard for visible emissions.

The provisions of Article 1 (9VAC5-40-60 et seq.) of 9VAC5-40 (Emission Standards for Visible Emissions and Fugitive Dust/Emissions, Rule 4-1) apply, with the exception of 9VAC5-40-90 (Standard for fugitive dust/emissions).

9VAC5-40-8240. Standard for fugitive dust/emissions.

A. The provisions of Article 1 (9VAC5-40-60 et seq.) of 9VAC5-40 (Emission Standards for Visible Emissions and Fugitive Dust/Emissions, Rule 4-1) apply, with the exception of 9VAC5-40-80 (Standard for visible emissions), 9VAC5-40-100 (Monitoring), 9VAC5-40-110 (Test methods and procedures), 9VAC5-40-120 (Waivers).

B. No owner or other person shall cause or permit to be discharged into the atmosphere from any ash conveying system (including conveyor transfer points) any visible emissions for more than 5 percent of hourly observation period, measured at three, 1-hour observation periods.

9VAC5-40-8250. Standard for odor.

The provisions of Article 2 (9VAC5-40-130 et seq.) of 9VAC5-40 (Existing Stationary Sources) apply.

9VAC5-40-8260. Standard for toxic pollutants.

The provisions of Article 4 (9VAC5-60-200 et seq.) of 9VAC5-60 (Hazardous Air Pollutant Sources) apply.

9VAC5-40-8270. Operator training and certification.

The provisions of 40 CFR 60.5130, 40 CFR 60.5135, 40 CFR 60.5140, 40 CFR 60.5145, 40 CFR 60.5150, 40 CFR 60.5155, and 40 CFR 60.5160 apply.

9VAC5-40-8280. Compliance schedule.

A. SSI units shall achieve final compliance or cease operation as expeditiously as practicable but not later than March 21, 2016.

B. The owner shall submit a final control plan no later than March 21, 2013.

C. The provisions of 40 CFR 60.5085, 40 CFR 60.5090, 40 CFR 60.5095, 40 CFR 60.5100, 40 CFR 60.5105, 40 CFR 60.5110, 40 CFR 60.5115, 40 CFR 60.5120, and 40 CFR 60.5125 apply.

9VAC5-40-8290. Operating requirements.

A. No owner or other person shall operate any SSI unit in a manner that does not comply with the provisions of subsection B of this section.

B. The provisions of 40 CFR 60.5170 and 40 CFR 60.5175 apply.

9VAC5-40-8300. Compliance.

A. With regard to the emissions standards in 9VAC5-40-8240 A, 9VAC5-40-8250 and 9VAC5-40-8260, the provisions of 9VAC5-40-20 (Compliance) apply.

B. With regard to the emission limits in 9VAC5-40-8220, 9VAC5-40-8240 B and 9VAC5-40-8290, the following provisions apply:

1. 9VAC5-40-20 B, C, D, and E;

2. To the extent specified in the federal regulations cited in subdivision 3 of this subdivision, 40 CFR 60.7, 40 CFR 60.8, 40 CFR 60.11, and 40 CFR 60.13; and

3. 40 CFR 60.5185, 40 CFR 60.5190, 40 CFR 60.5195, 40 CFR 60.5200, 40 CFR 60.5205, 40 CFR 60.5210 and 40 CFR 60.5215.

9VAC5-40-8310. Performance testing, monitoring, and calibration requirements.

A. With regard to the emissions standards in 9VAC5-40-8240 A, 9VAC5-40-8250 and 9VAC5-40-8260, the provisions of 9VAC5-40-30 (Emission testing) and 9VAC5-40-40 (Monitoring) apply.

B. With regard to the emission limits in 9VAC5-40-8220, 9VAC5-40-8240 B and 9VAC5-40-8290, the following provisions apply:

1. 9VAC5-40-30 D and G;

2. 9VAC5-40-40 A and F;

3. 40 CFR 60.8(b) through (f), with the exception of paragraph (a);

4. 40 CFR 60.13; and

5. 40 CFR 60.5220 and 40 CFR 60.5225.

9VAC5-40-8320. Recordkeeping and reporting.

A. With regard to the emissions standards in 9VAC5-40-8240 A, 9VAC5-40-8250 and 9VAC5-40-8260, the provisions of 9VAC5-40-50 (Notification, records and reporting)

apply.

B. With regard to the emission limits in 9VAC5-40-8220, 9VAC5-40-8240 B and 9VAC5-40-8290, the following provisions apply:

1. 9VAC5-40-50 F and H;

2. 40 CFR 60.7; and

3. 40 CFR 60.5230 and 40 CFR 60.5235.

9VAC5-40-8330. Registration.

The provisions of 9VAC5-20-160 (Registration) apply.

9VAC5-40-8340. Facility and control equipment maintenance or malfunction.

A. With regard to the emissions standards in 9VAC5-40-8240 A, 9VAC5-40-8250 and 9VAC5-40-8260, the provisions of 9VAC5-20-180 (Facility and control equipment maintenance or malfunction) apply.

B. With regard to the emission limits in 9VAC5-40-8220, 9VAC5-40-8240 B and 9VAC5-40-8290, the following provisions apply:

1. 9VAC5-20-180 with the exception of subsections E, F, and G; and

2. 40 CFR 60.5180 and 40 CFR 60.5181.

9VAC5-40-8350. Federal (Title V) operating permits.

A. The provisions of 40 CFR 60.5240 and 40 CFR 60.5245 apply.

B. Owners to which this section applies should contact the appropriate regional office for guidance on applying for a federal (Title V) operating permit.

9VAC5-40-8360. Other permits.

A permit may be required prior to beginning any of the activities specified below if the provisions of 9VAC5 -50 (New and Modified Stationary Sources) and 9VAC5-80 (Permits for Stationary Sources) apply. Owners contemplating such action should review those provisions and contact the appropriate regional office for guidance on whether those provisions apply.

1. Construction of a facility.

2. Reconstruction (replacement of more than half) of a facility.

3. Modification (any physical change to equipment) of a facility.

4. Relocation of a facility.

5. Reactivation (re-startup) of a facility.

6. Operation of a facility.

9VAC5-40-8370. Documents incorporated by reference.

A. The United States Environmental Protection Agency (EPA) regulations promulgated at Subpart MMMM (Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units) of 40 CFR Part 60 and designated in subsection B of this section are incorporated by reference into this article. The 40 CFR section numbers appearing in subsection B of this section identify the specific provisions incorporated by reference. The specific version of the provisions incorporated by reference shall be that contained in the CFR in effect as specified in 9VAC5-20-21 B.

B. The following documents from the United States Environmental Protection Agency are incorporated herein by reference:

Model Rule, Increments of Progress
40 CFR 60.5085, What are my requirements for meeting increments of progress and achieving final compliance?
40 CFR 60.5090, When must I complete each increment of progress?
40 CFR 60.5095, What must I include in the notifications of achievement of increments of progress?
40 CFR 60.5100, When must I submit the notifications of achievement of increments of progress?
40 CFR 60.5105, What if I do not meet an increment of progress?
40 CFR 60.5110, How do I comply with the increment of progress for submittal of a control plan?
40 CFR 60.5115, How do I comply with the increment of progress for achieving final compliance?
40 CFR 60.5120, What must I do if I close my SSI unit and then restart it?
40 CFR 60.5125, What must I do if I plan to permanently close my SSI unit and not restart it?

Model Rule, Operator Training and Qualification
40 CFR 60.5130, What are the operator training and qualification requirements?
40 CFR 60.5135, When must the operator training course be completed?
40 CFR 60.5140, How do I obtain my operator qualification?
40 CFR 60.5145, How do I maintain my operator qualification?

40 CFR 60.5150, How do I renew my lapsed operator qualification?
40 CFR 60.5155, What if all the qualified operators are temporarily not accessible?
40 CFR 60.5160, What site-specific documentation is required and how often must it be reviewed by qualified SSI operators and other plant personnel who may operate the unit according to the provisions of §40CFR60.5155(a)?

Model Rule, Emission Limits, Emission Standards, and Operating Limits and Requirements

40 CFR 60.5165, What emission limits and standards must I meet and by when?
40 CFR 60.5170, What operating limits and requirements must I meet and by when?
40 CFR 60.5175, How do I establish operating limits if I do not use a wet scrubber, fabric filter, electrostatic precipitator, activated carbon injection, or afterburner, or if I limit emissions in some other manner, to comply with the emission limits?
40 CFR 60.5180, Do the emission limits, emission standards, and operating limits apply during periods of startup, shutdown, and malfunction?
40 CFR 60.5181, How do I establish affirmative defense for exceedance of an emission limit or standard during malfunction?

Model Rule, Initial Compliance Requirements

40 CFR 60.5185, How and when do I demonstrate initial compliance with the emission limits and standards?
40 CFR 60.5190, How do I establish my operating limits?
40 CFR 60.5195, By what date must I conduct the initial air pollution control device inspection and make any necessary repairs?
40 CFR 60.5200, How do I develop a site-specific monitoring plan for my continuous monitoring systems, bag leak detection system, and ash handling system, and by what date must I conduct an initial performance evaluation of my continuous monitoring systems and bag leak detection system?

Model Rule, Continuous Compliance Requirements

40 CFR 60.5205, How and when do I demonstrate continuous compliance with the emission limits and standards?
40 CFR 60.5210, How do I demonstrate continuous compliance with my operating limits?
40 CFR 60.5215, By what date must I conduct annual air pollution control device inspections and make any necessary repairs?

Model Rule, Performance Testing, Monitoring, and Calibration Requirements

40 CFR 60.5220, What are the performance testing, monitoring, and calibration requirements for compliance with the emission limits and standards?
40 CFR 60.5225, What are the monitoring and calibration requirements for compliance with my operating limits?

Model Rule, Recordkeeping and Reporting

40 CFR 60.5230, What records must I keep?
40 CFR 60.5235, What reports must I submit?

Model Rule, Title V Operating Permits

40 CFR 60.5240, Am I required to apply for and obtain a title V operating permit for my existing SSI unit?
40 CFR 60.5245, When must I submit a title V permit application for my existing SSI unit?

Model Rule, Definitions

40 CFR 60.5250, What definitions must I know?

TABLES

Table 2 to Subpart MMMM of 40 CFR Part 60, Model Rule, Emission Limits and Standards for Existing Fluidized Bed Sewage Sludge Incineration Units.
Table 3 to Subpart MMMM of 40 CFR Part 60, Model Rule, Emission Limits and Standards for Existing Multiple Hearth Sewage Sludge Incineration Units.
Table 4 to Subpart MMMM of 40 CFR Part 60, Model Rule, Operating Parameters for Existing Sewage Sludge Incineration Units.
Table 5 to Subpart MMMM of 40 CFR Part 60, Model Rule, Toxic Equivalency Factors.
Table 6 to Subpart MMMM of 40 CFR Part 60, Model Rule, Summary of Reporting Requirements for Existing Sewage Sludge Incineration Units.

COMMONWEALTH OF VIRGINIA
§ 111(D)/129 PLAN
FOR SEWAGE SLUDGE INCINERATORS

EMISSIONS INVENTORY

The following inventory identifies the affected facilities and estimated emissions of the designated pollutants. There are no facilities that have ceased operation but have not been dismantled.

SIP\111-D\SSI\PRT1B-FIN.doc

VA DEQ Contact: Robina Jordan, (540) 562-6820
Blacksburg Sanitary Authority Contact: Michael Vaught, (540) 522-6940

Summary of Emissions from the # SSI Unit No. 20911			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	7.28 ppmv	0.9103500000	Rate = 7/22/03 RA Audit EFactor = 2.1 #/T Federal Factor
Particulate Matter	0.0032 gr/dscf	0.4768500000	Rate = 6/13/90 NSPS Stack test EFactor = 1.1 #/T AP-42 Table 2.2-6
Nitrogen Oxides	58.4 ppmv	0.7369500000	Rate = 4/11/74 test, similar facility EFactor = 1.7 #/T Federal Factor
Hydrogen Chloride	0.0528 ppmv	0.0433500000	Rate = Conversion of #/hr EFactor = 0.1 #/T AP-42 Table 2.2-7
Sulfur Dioxide	2.5 ppmv	0.3468000000	Rate = 1/24/74 test, similar facility EFactor = 0.8 #/T AP-42 Table 2.2-6
Cadmium	0.0038 mg/dscm	0.0004768500	Rate = 6/13/90 NSPS Stack Test EFactor = 0.0011 #/T AP-42 Table 2.2-8
Lead	0.0116 , mg/dscm	0.0173400000	Rate = 6/13/90 NSPS Stack Test EFactor = 0.04 #/T Federal Factor
Mercury	0.0018 mg/dscm	0.0000260100	Rate = Conversion of #/Hr EFactor = 0.00006 AP-42 Table 2.2-7
Dioxins/Furans	1.55 ng/dscm, total mass	0.0000000209	Rate = Conversion of #/Hr EFactor = 0.0000000482#/T EPA-454/R-97-003
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart FFFF 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

Rate = Determination of Emission Rate Units
EFactor = Determination of Annual Emissions: Emission Factor in CEDS Database

VA DEQ Contact: Katherine Fisher, (703) 583-3840
HL Mooney Water Reclamation Facility Contact: Maureen O'Shaughnessy (703)393-2063

Summary of Emissions from the # SSI Unit No. 71751 Envirotech Multi-hearth Incinerator (7 hearths), rated at 48 dry tons per day			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	1732.46 ppmv	99.2 tpy	Footnote 1, 3, 5, and 6
Particulate Matter*	0.020 gr/dscf	4.16 tpy	Footnote 1, 3, 5 and 6
Nitrogen Oxides	388.5 ppmv	16.0 tpy	Footnote 1, 3, 4 and 5
Hydrogen Chloride	0.6 ppmv @ 7% O2	0.064 tpy	AP-42 (0.02 lb/ton) for ppmv & tpy
Sulfur Dioxide	7.6 ppmv	14.72 tpy	Footnote 1, 3, 5 and 6
Cadmium	18 ug/dNm^3	0.173 tpy	Footnote 1, 5, and 6
Lead	29 ug/dNm^3	0.32 tpy	Footnote 1, 3, 5, and 6
Mercury	46 ug/dNm^3	0.15 tpy	Footnote 1, 5, and 6
Dioxins/Furans	100 ng/dscm, total mass	0.00000077 tpy	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

1. Limits – 2.0 dry tons per hour, 48 dry tons per day, 6,400 dry tons per year. Sulfur content of the fuel – 0.3% permit limit

2. *PM is as PM 10.

3. Annual emissions for PM, SO2, NO2, CO, and Lead are based on emission factors from the most recent permit action (March 1, 2012) time the permitted annual sludge limit /2000

4. NOx from October 11, 1995 Stack Testing Data (68.74 ppmv @ 18.6% O2).

5. Annual limits from AP 42 for Cd, Hg, HCl, and Dioxins.

6. Information from similar facility (Norman Cole P1 and P2 units, Hankins Seven Hearth Sludge Incinerator).

Summary of Emissions from the # SSI Unit No. 71751 Hankin Fluidized Bed Incinerator, rated at 45 dry tons per day			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	4.9 ppmv	10.67625 tpy	See footnotes 1, 3, and 4
Particulate Matter*	0.904 mg/dscf	4.9275 tpy	See footnotes 1, 3, and 4
Nitrogen Oxides	156 ppmv	18.88875 tpy	See footnotes 1, 3, and 4
Hydrogen Chloride	0.0583 ppmv	0.08 tpy	See footnotes 4 and 5
Sulfur Dioxide	23.5 ppmv	22.995 tpy	See footnotes 1, 3, and 4
Cadmium	0.0026 mg/dscm	0.008 tpy	See footnotes 4 and 5
Lead	0.0032 mg/dscm	1.29575 tpy	See footnotes 1, 3, and 4
Mercury	0.031 mg/dscm	0.00005 tpy	See footnotes 4 and 5
Dioxins/Furans	0.826 ng/dscm, total mass	0.000000082 tpy	See footnotes 4 and 5
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

1. Limits – 1.875 tons per hour of sludge, 45 dry tons per day, 16,425 dry tons per year, 365 days a year operation, Sulfur content of the fuel – 0.3% permit limit

2. *PM is as PM 10

3. Annual emissions for PM, SO2, NO2, CO, and Lead are based on emission factors from the most recent permit action (March 1, 2012) times the permitted annual sludge limit /2000

4. Cd, CO, HCl, Hg, NOx, Pb, dioxins, PM, and SO2 from stack testing on May 10-11, 2011.

5. Annual limits from AP 42 for Cd, Hg, HCl, and Dioxins. 0.01 HCl lbs/ton, 0.00000001 dioxins lbs/ton, 0.001 Cd lbs/ton, 0.00006 Hg lbs/ton.

VA DEQ Contact: James Kyle, (804) 527-5047

Hopewell Regional Wastewater Treatment Plant Contact: Jeanie Grandstaff, (804) 541-2214

Summary of Emissions from the # SSI Unit No. 50735
Multi-hearth Sludge Incinerator, rated at 78 dry tons per day

Pollutant	Emission Rate, units [1]	Annual Emissions, tpy	Emissions Determination [2]
Carbon Monoxide	5035.4 ppmv (4.0 lb/dry ton)	21.3	Stack Test
Particulate Matter	0.02 gr/dscf (0.52 lb/dry ton)	2.8	Stack Test
Nitrogen Oxides	2291.3 ppmv (2.99 lb/dry ton)	15.9	Stack Test
Hydrogen Chloride	19.3 ppmv (0.02 lb/dry ton)	0.1	AP-42
Sulfur Dioxide	549.9 ppmv (1.0 lb/dry ton)	5.3	Stack Test
Cadmium	0.079 mg/dscm (6.6×10^{-3} lb/dry ton)	0.035	AP-42
Lead	0.102 mg/dscm (0.06 lb/dry ton)	0.3	AP-42
Mercury	0.0145 mg/dscm (1.0×10^{-5} lb/dry ton)	5.3×10^{-5}	AP-42
Dioxins/Furans	100 ng/dscm, total mass	1.76×10^{-2}	AP-42 (1.5E-6 lb/ton) for ng/dscm & tpy

1 - Concentration converted to 7% O_2, dry basis and as specified in subpart FFFF
2 - Defines emissions determination method - a) stack test , b) material balance, or c) emissions factor

VA DEQ Contact: Ken Pinzel (757)518-2191
HRSD Contact: Mark Feltner (757)460-4254

Annual emissions from the emission inventory for 2011.

Throughput: 3229 tons dry sludge in 2011

Summary of Emissions from the # SSI Unit No. 60349 HRSD - Army Base			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	2111 ppmv @ 7% O2	50.0	ST for ppm @ 7% O2 AP-42 (31 lb/ton) for tpy
Particulate Matter	0.032 gr/dscf @ 7% O2	2.1	ST for gr/dscf @ 7% O2 ST (1.29 lb/ton) for tpy
Nitrogen Oxides	128 ppmv @ 7% O2	8.1	ST for ppm @ 7% O2 AP-42 (5 lb/ton) for tpy
Hydrogen Chloride	0.6 ppmv @ 7% O2	0.032	AP-42 (0.02 lb/ton) for ppmv & tpy
Sulfur Dioxide	790 ppmv @ 7% O2	77.5	EF (48 lb/ton) based on 1.2%S in sludge for ppmv & tpy
Cadmium	0.11 mg/dscm @ 7% O2	0.010	ST for ppm @ 7% O2 ST: 1.07 g/hr * 8760 hr/yr for tpy
Lead	0.40 mg/dscm @ 7% O2	0.036	ST for ppm @ 7% O2 ST: 3.77 g/hr * 8760 hr/yr for tpy
Mercury	0.14 mg/dscm @ 7% O2	0.010	ST for ppm @ 7% O2 ST: (0.74 g/hr & 1.35 g/hr) * 8760 hr/yr for tpy
Dioxins/Furans	100 ng/dscm, total mass @ 7% O2	3.9 E-7	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

Throughput: 7443 tons dry sludge in 2011

Summary of Emissions from the # SSI Unit No. 60350 HRSD - VIP			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	2804 ppmv @ 7% O2	115.4	ST for ppm @ 7% O2 AP-42 (31 lb/ton) for tpy
Particulate Matter	0.017 gr/dscf @ 7% O2	3.2	ST for gr/dscf @ 7% O2 ST (0.85 lb/ton) for tpy
Nitrogen Oxides	177 ppmv @ 7% O2	18.6	ST for ppm @ 7% O2 AP-42 (5 lb/ton) for tpy
Hydrogen Chloride	0.6 ppmv @ 7% O2	0.074	AP-42 (0.02 lb/ton) for ppmv & tpy
Sulfur Dioxide	760 ppmv @ 7% O2	178.6	EF (48 lb/ton) based on 1.2%S in sludge for ppmv & tpy
Cadmium	0.075 mg/dscm @ 7% O2	0.017	ST for ppm @ 7% O2 ST: 1.81 g/hr * 8760 hr/yr for tpy
Lead	0.46 mg/dscm @ 7% O2	0.11	ST for ppm @ 7% O2 ST: 11.2 g/hr * 8760 hr/yr for tpy
Mercury	0.064 mg/dscm @ 7% O2	0.011	ST for ppm @ 7% O2 ST: (1.03 g/hr & 1.35 g/hr) for tpy
Dioxins/Furans	100 ng/dscm, total mass @ 7% O2	9.1 E-7	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

Throughput: 7221 tons dry sludge in 2011

Summary of Emissions from the # SSI Unit No. 60351 HRSD - Boat Harbor			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	1337 ppmv @ 7% O2	111.9	ST for ppm @ 7% O2 AP-42 (31 lb/ton) for tpy
Particulate Matter	0.030 gr/dscf @ 7% O2	3.2	ST for gr/dscf @ 7% O2 ST (0.89 lb/ton) for tpy
Nitrogen Oxides	185 ppmv @ 7% O2	18.1	ST for ppm @ 7% O2 AP-42 (5 lb/ton) for tpy
Hydrogen Chloride	1 ppmv @ 7% O2	0.072	AP-42 (0.02 lb/ton) for & ppmv & tpy
Sulfur Dioxide	1470 ppmv @ 7% O2	173.3	EF (48 lb/ton) based on 1.2%S in sludge for ppmv & tpy
Cadmium	0.054 mg/dscm @ 7% O2	0.0056	ST for ppm @ 7% O2 ST: 0.58 g/hr * 8760 hr/yr for tpy
Lead	0.069 mg/dscm @ 7% O2	0.0068	ST for ppm @ 7% O2 ST: (0.71 g/hr * 8760 hr/yr for tpy
Mercury	0.13 mg/dscm @ 7% O2	0.011	ST for ppm @ 7% O2 ST: (0.79 g/hr & 1.47 g/hr) * 8760 hr/yr for tpy
Dioxins/Furans	200 ng/dscm, total mass @ 7% O2	8.8 E-7	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

Throughput: 6181 tons dry sludge in 2011

Summary of Emissions from the # SSI Unit No. 60355 HRSD - Williamsburg			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	3441 ppmv @ 7% O2	95.8	ST for ppm @ 7% O2 AP-42 (31 lb/ton) for tpy
Particulate Matter	0.018 gr/dscf @ 7% O2	3.6	ST for gr/dscf @ 7% O2 ST (1.15 lb/ton) for tpy
Nitrogen Oxides	346 ppmv @ 7% O2	15.5	ST for ppm @ 7% O2 AP-42 (5 lb/ton) for tpy
Hydrogen Chloride	0.8 ppmv @ 7% O2	0.062	AP-42 (0.02 lb/ton) for ppmv & tpy
Sulfur Dioxide	1040 ppmv @ 7% O2	148.3	EF (48 lb/ton) based on 1.2%S in sludge for ppmv & tpy
Cadmium	0.032 mg/dscm @ 7% O2	0.0045	ST: 0.47 g/hr * 8760 hr/yr for tpy
Lead	0.097 mg/dscm @ 7% O2	0.014	ST for ppm @ 7% O2 ST: 1.41g/hr * 8760 hr/yr for tpy
Mercury	0.10 mg/dscm @ 7% O2	0.011	ST for ppm @ 7% O2 ST: (1.24 g/hr & 1.06 g/hr) * 8760 hr/yr for tpy
Dioxins/Furans	100 ng/dscm, total mass @ 7% O2	7.5 E-7	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

Throughput: 4460 tons dry sludge in 2011

Summary of Emissions from the # SSI Unit No. 60431 HRSD - Chesapeake Elizabeth			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	3012 ppmv @ 7% O2	69.1	ST for ppm @ 7% O2 AP-42 (31 lb/ton) for tpy
Particulate Matter	0.027 gr/dscf @ 7% O2	3.1	ST for gr/dscf @ 7% O2 ST (1.37 lb/ton) for tpy
Nitrogen Oxides	194 ppmv @ 7% O2	11.2	ST for ppm @ 7% O2 AP-42 (5 lb/ton) for tpy
Hydrogen Chloride	0.6 ppmv @ 7% O2	0.045	AP-42 (0.02 lb/ton) for ppmv & tpy
Sulfur Dioxide	840 ppmv @ 7% O2	107.0	EF (48 lb/ton) based on 1.2%S in sludge for ppmv & tpy
Cadmium	0.040 mg/dscm @ 7% O2	0.0046	ST for ppm @ 7% O2 ST: 0.47 g/hr * 8760 hr/yr for tpy
Lead	0.35 mg/dscm @ 7% O2	0.039	ST for ppm @ 7% O2 ST: 4.07 g/hr * 8760 hr/yr for tpy
Mercury	0.12 mg/dscm @ 7% O2	0.012	ST for ppm @ 7% O2 ST: (1.20 g/hr & 1.22 g/hr) * 8760 hr/yr for tpy
Dioxins/Furans	100 ng/dscm, total mass @ 7% O2	5.4	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

VA DEQ Contact: Katherine Fisher, (703) 583-3840
Noman M Cole Jr. Pollution Control Plant Contact: Mike McGrath, (703)550-9740

Summary of Emissions from the # SSI Unit No. __70714__ P1 and P2 Hankins Seven Hearth Sludge Incinerators, 45 dry tons/day each			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy (each)**	**Emissions Determination [2]**
Carbon Monoxide	1732.46 ppmv	387.7 tpy	See footnote b and e
Particulate Matter	0.020 gr/dscf	7.39 tpy	See footnote b and d
Nitrogen Oxides	212.07 ppmv	100.27 tpy	See footnote b and c
Hydrogen Chloride	0.19 ppmv	0.056 tpy	See footnote e
Sulfur Dioxide	7.6 ppmv	3.78 tpy	See footnote e
Cadmium	18 ug/dNm^3	0.0066 tpy	See footnote b, d and e
Lead	29 ug/dNm^3	0.05 tpy	See footnote b, d and e
Mercury	46 ug/dNm^3	0.02 tpy	See footnote b, d and e
Dioxins/Furans	100 ng/dscm, total mass	0.0000001971 tpy	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or c) emissions factor			

a. *PM is as PM 10, concentration is gr/dscf @ 12%CO

b. Max capacity is 16425 dry tons of sludge per year each. 365 days a year.

c. NOx ppmv and lbs/dry ton sludge from 5/22/07 stack test. Nox lbs/hr was 12.21.

d. Cadmium, PM, Hg, and Lead from Sept 29-30, 2004 stack tests. Cd 0.0015 lbs/hr, Pb 0.0063 lbs/hr, PM 0.9 lbs/ton dry sludge, Hg 42.13 g/day. Metals were emission factors only – stack testing did not include concentration data.

e. CO, HCL, and SO2 concentration and lbs/ton from 6/20/96 stack test. 47.21 lbs/ton CO, 0.0068 lbs/ton of HCL, and 0.46 lbs/ton SO2. Cd, Hg, and Pb concentrations from 1996 stack test in micrograms per dry normal cubic meter.

Summary of Emissions from the # SSI Unit No. 70714 P3 and P4 Hankins Six Hearth Sludge Incinerators, 92 dry tons/day each			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	209.38 ppmv	122.57 tpy	See footnote b and e
Particulate Matter	0.035 gr/dscf	24.0 tpy	See footnote b and d
Nitrogen Oxides	183.39 ppmv	110.31 tpy	See footnote b and c
Hydrogen Chloride	0.12 ppmv	0.17 tpy	See footnote b and f
Sulfur Dioxide	3.9 ppmv	9.23 tpy	See footnote b and f
Cadmium	25 ug/dNm^3	0.01 tpy	See footnote b, d, and g
Lead	76 ug/dNm^3	0.07 tpy	See footnote b, d, and g
Mercury	39 ug/dNm^3	0.025 tpy	See footnote b, d, and g
Dioxins/Furans	100 ng/dscm, total mass	0.000004 tpy	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

a. *PM is as PM 10, concentration is gr/dscf @ 12%CO
b. Max capacity is 33580 dry tons of sludge per year each
c. NOx ppmv and lbs/dry ton sludge from 5/22/07 stack test. NOx was 6.57 lbs/hr.
d. PM, Mercury, Cadmium, and Lead from Sept 29-30, 2004 stack tests. Cd 0.0031 lbs/hr, Pb 0.016 lbs/hr, PM 01.43 lbs/ton dry sludge, Hg 53.779 g/day. Metals were emission factors only – stack testing did not include concentration data.
e. CO concentration and lbs/ton from 6/21/96 and 6/27/96 stack test. 7.3 lbs/ton CO.
f. SO2 and HCL concentration and emission factor from 1996 stack test. O.55 lbs/ton SO2, and 0.01 lbs/ton HCL.
g. Cd, Hg, and Pb concentrations from 1996 stack test in micrograms per dry normal cubic meter.

Summary of Emissions from the # SSI Unit No. __70714__ P5 and P6 Hankins Eight Hearth Sludge Incinerators, 38 dry tons/day each			
Pollutant	**Emission Rate, units [1]**	**Annual Emissions, tpy**	**Emissions Determination [2]**
Carbon Monoxide	1732.46 ppmv	325.5 tpy	See footnote c and e.
Particulate Matter	0.020 gr/dscf	871 tpy	See footnote c and e.
Nitrogen Oxides	212.07 ppmv	53.34 tpy	See footnote c and e.
Hydrogen Chloride	0.6 ppmv @ 7% O2	0.21 tpy	AP-42 (0.02 lb/ton) for ppmv. Tpy from footnote b
Sulfur Dioxide	7.6 ppmv	42 tpy	See footnote c and e.
Cadmium	18 ug/dNm^3	0.389 tpy	See footnote d and e.
Lead	29 ug/dNm^3	1.05 tpy	See footnote c and e.
Mercury	46 ug/dNm^3	0.0483 tpy	See footnote d and e.
Dioxins/Furans	100 ng/dscm, total mass	0.00000252 tpy	AP-42 (2.4 E-7 lb/ton) for ng/dscm & tpy
1 - Concentration converted to 7% O_2, dry basis and as specified in subpart MMMM 2 - Defines emissions determination method - a) stack test , b) material balance, or 3) emissions factor			

a. *PM is as PM 10

b. Limits – 21,000 dry tons per year (combined)

c. Emission factors from CEDS: CO-31.0 lbs/ton, Pb-0.1 lbs/ton, NOx-5.08 lbs/ton, PM 10-83 lbs/ton, SO2-4.0 lbs/ton

d. Annual rate determined using AP-42 factors. Unit P5 and P6 appear to have no controls (?), just an afterburner.

e. Concentrations based on the stack testing data for P1 and P2 (somewhat similar facility).

EPA REQUIREMENTS FOR § 111(D)/129 PLANS FOR SEWAGE SLUDGE INCINERATORS

EPA's requirements for § 111(d)/129 plans for sewage sludge incinerators are delineated in 40 CFR 60.5015, which is reprinted below. Virginia's fulfillment of each federal requirement is correlated in the Preamble to this plan.

Sec. 60.5015 What must I include in my state plan?

(a) You must include the nine items described in paragraphs (a)(1) through (a)(9) of this section in your state plan.

(1) Inventory of affected SSI units, including those that have ceased operation but have not been dismantled.

(2) Inventory of emissions from affected SSI units in your state.

(3) Compliance schedules for each affected SSI unit.

(4) Emission limits, emission standards, operator training and qualification requirements, and operating limits for affected SSI units that are at least as protective as the emission guidelines contained in this subpart.

(5) Performance testing, recordkeeping, and reporting requirements.

(6) Certification that the hearing on the state plan was held, a list of witnesses and their organizational affiliations, if any, appearing at the hearing, and a brief written summary of each presentation or written submission.

(7) Provision for state progress reports to EPA.

(8) Identification of enforceable state mechanisms that you selected for implementing the emission guidelines of this subpart.

(9) Demonstration of your state's legal authority to carry out the sections 111(d) and 129 state plan.

(b) Your state plan may deviate from the format and content of the emission guidelines contained in this subpart. However, if your state plan does deviate in content, you must demonstrate that your state plan is at least as protective as the emission guidelines contained in this subpart. Your state plan must address regulatory applicability, increments of progress for retrofit, operator training and qualification, emission limits and standards, performance testing, operating limits, monitoring, and recordkeeping and reporting.

(c) You must follow the requirements of subpart B of this part (Adoption and Submittal of state plans for Designated Facilities) in your state plan.

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ENCLOSURE 2

CERTIFICATION OF PUBLIC PARTICIPATION ACTIVITIES

As required by 40 CFR 60.23(c), a hearing to accept public testimony concerning a proposed § 111(d)/129 plan was held in the Seventh Floor Conference Room, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia at 9:00 a.m. on December 5, 2012.

As required by 40 CFR 60.23(d), the public was given notice of the hearing in the Virginia Register on November 5 (copy attached).

The Regional Administrator for the U.S. Environmental Protection Agency was notified of the hearing, as was each local air pollution control agency which will be significantly impacted by the revision and is located in the affected Air Quality Control Regions. In addition, the District of Columbia and Maryland, which share affected interstate Air Quality Control Regions with Virginia, were notified of the hearing. These notifications follow the requirements of 40 CFR Part 60.23(d).

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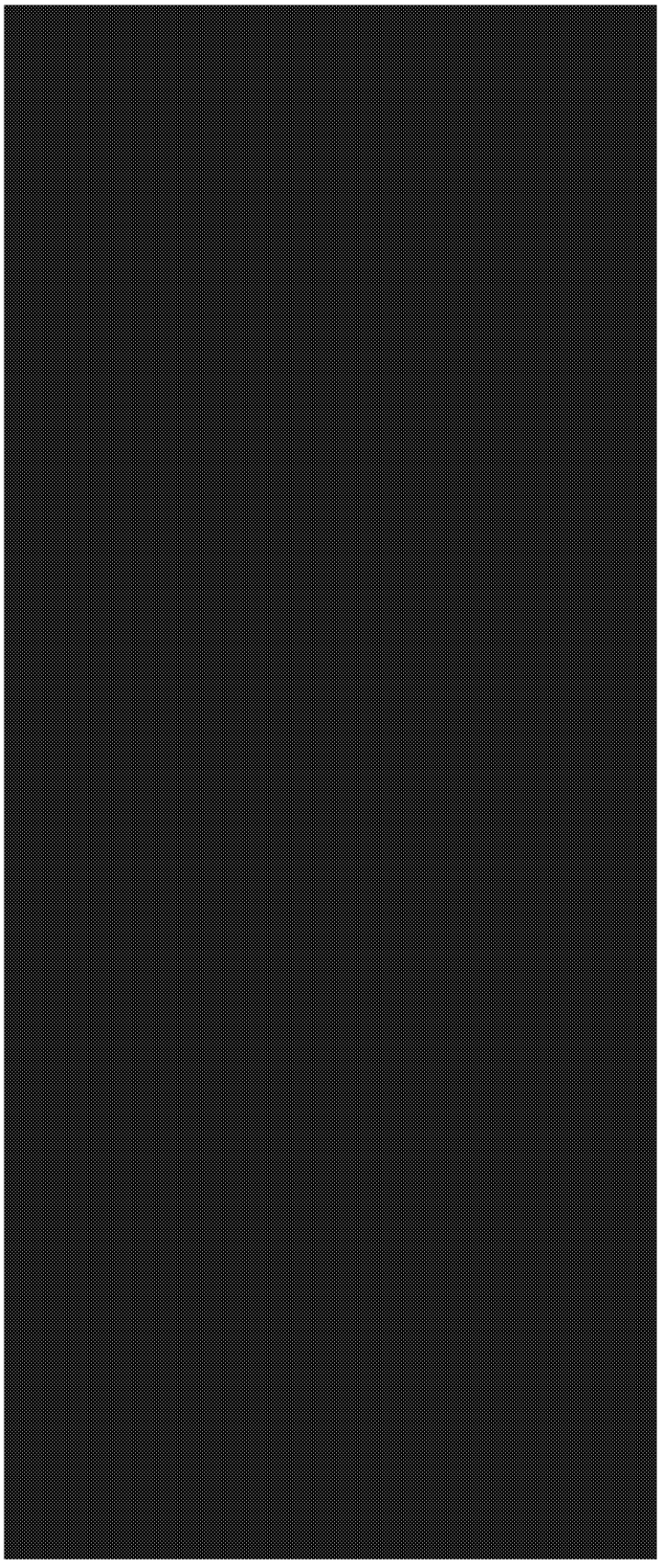


STATE AIR POLLUTION CONTROL BOARD

Proposed Section 111(d)/129 Plan

Notice of action: The Department of Environmental Quality (DEQ) is announcing an opportunity for public comment on a proposed Commonwealth of Virginia § 111(d)/129 plan. Section 111(d)/129 plans are developed by the Commonwealth in order to fulfill its responsibilities under the federal Clean Air Act to meet the ambient air quality standards for designated pollutants promulgated by the U.S. Environmental Protection Agency (EPA) under the Act. The Commonwealth intends to submit the plan to EPA in accordance with the requirements of the federal Clean Air Act.

Regulations affected: The regulations of the board affected by this action are as follows: Documents incorporated by reference (9VAC5-20-21 of 9VAC5-20 (General Provisions)); and Emission Standards for Sewage Sludge Incineration Units, Article 55 (9VAC5-40-8200 et seq.) of 9VAC5-40 (Existing Stationary Sources).

Purpose of notice: DEQ is seeking comment on the overall plan and on the issue of whether any regulations included in the plan should be submitted to EPA as part of the plan.

Public comment period: November 5, 2012, to December 6, 2012.

Public hearing: A public hearing will be held in Seventh Floor Conference Room, Department of Environmental Quality, 629 East Main Street, Richmond, VA, at 9 a.m. on December 5, 2012, to accept comments concerning the proposed plan. Using the procedures explained below, DEQ will also accept written comments through December 6, 2012.

Public comment stage: The public comment period and hearing are being conducted to satisfy the public participation requirements of federal regulations of 40 CFR 60.23(c) and (d). The regulations included in this plan have been adopted by the State Air Pollution Control Board in accordance with the Code of Virginia and with public participation as required by the Code of Virginia, the federal Clean Air Act, and the Code of Federal Regulations. Because the regulations have

been adopted, DEQ is accepting comment only on the issues cited above and not on the content of the regulations.

Description of proposal: EPA established designated pollutant emission guidelines for sewage sludge incinerators in the Federal Register of March 21, 2011 (76 FR 15372). In order to implement the guidelines, it was necessary for Virginia to develop and adopt a state regulation containing those limits. In addition to the regulations, the proposed plan contains an inventory of emissions from the affected facilities, a list of authorities being retained by EPA, and other supporting documentation.

Federal information: This notice is being given to satisfy the public participation requirements of federal regulations and not any provision of state law. The proposal will be submitted as § 111(d)/129 plan under §§ 111(d) and 129 of the federal Clean Air Act in accordance with 40 CFR 60.23(c) and (d). It is planned to submit all provisions of the proposal as a Commonwealth of Virginia § 111(d)/129 plan with the exception of state-only enforceable provisions, which are specifically identified in the plan.

How to comment: DEQ accepts written comments by email, fax, and postal mail. In order to be considered, comments must include the full name, address, and telephone number of the person commenting and be received by DEQ by the last day of the comment period. Both oral and written comments are accepted at the public hearing. DEQ prefers that comments be provided in writing, along with any supporting documents or exhibits. All materials received are part of the public record.

To review plan documents: The proposal is available on the DEQ Air Public Notices for Plans website: http://www.deq.state.va.us/Programs/Air/PublicNotices/airplansandprograms.aspx.

The documents may also be obtained by contacting the DEQ representative named below. The public may review the documents between 8:30 a.m. and 4:30 p.m. of each business day until the close of the public comment period at the following DEQ locations:

1) Main Street Office, 629 East Main Street, 8th Floor, Richmond, VA, telephone (804) 698-4070,

2) Blue Ridge Regional Office, Roanoke Location, 3019 Peters Creek Road, Roanoke, VA, telephone (540) 562-6700,

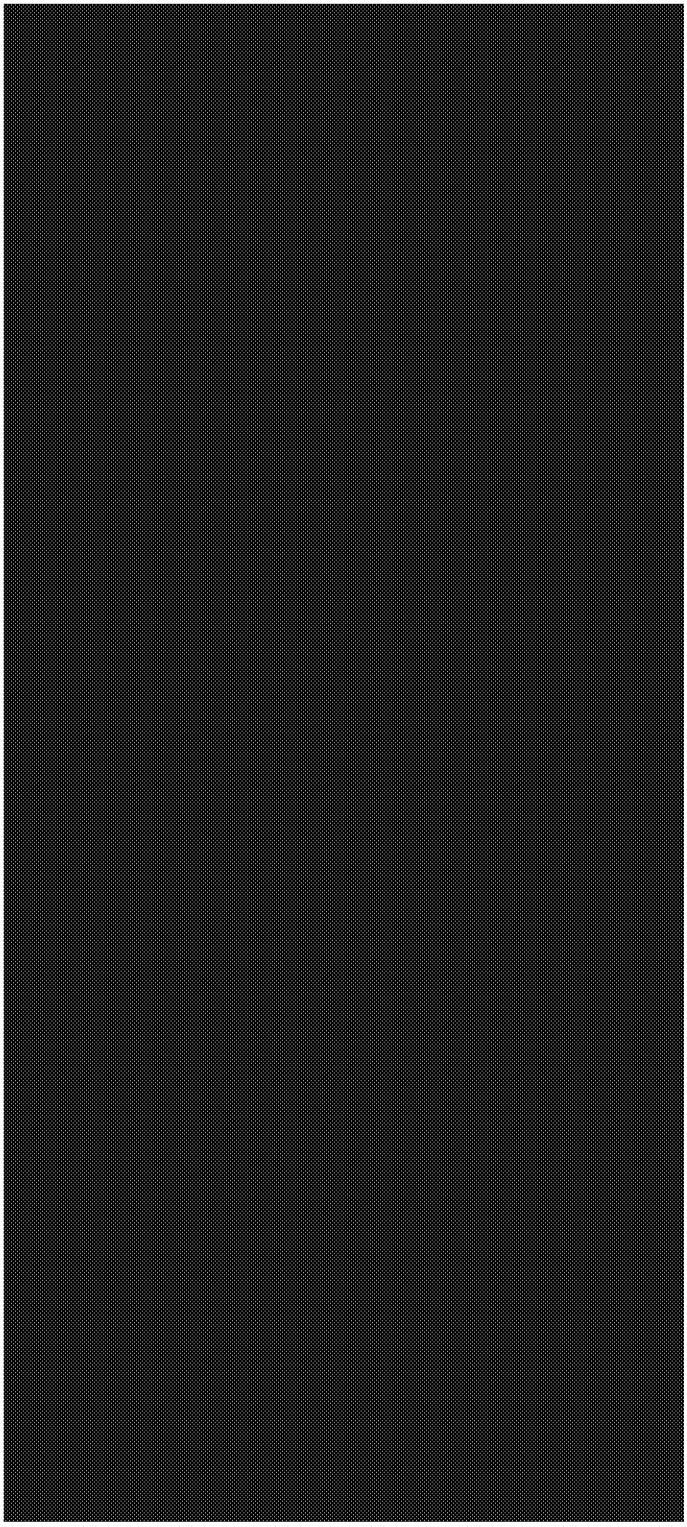
3) Piedmont Regional Office, 4949-A Cox Road, Glen Allen, VA, telephone (804) 527-5020,

4) Northern Regional Office, 13901 Crown Court, Woodbridge, VA, telephone (703) 583-3800, and

5) Tidewater Regional Office, 5636 Southern Blvd., Virginia Beach, VA, telephone (757) 518-2000.

Contact Information: Karen G. Sabasteanski, Department of Environmental Quality, 629 East Main Street

P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4426, FAX (804) 698-4510, TDD (804) 698-4021, or email karen.sabasteanski@deq.virginia.gov.



RECORD OF HEARING AND SUMMARY OF PUBLIC COMMENT

As required by 40 CFR 60.23(e), the complete record of the hearing, along with a list of commenters and the text of the written presentations or summary of the oral presentations, is located at the Air Division of the Department of Environmental Quality. The department contact to access this information is the Director, Air Division.

No comment was received on the proposal.

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